

Title (en)  
DISPLAY DEVICE

Title (de)  
ANZEIGEVORRICHTUNG

Title (fr)  
AFFICHEUR

Publication  
**EP 3249464 A1 20171129 (EN)**

Application  
**EP 15877543 A 20150612**

Priority  
• CN 201510014573 A 20150112  
• CN 2015081396 W 20150612

Abstract (en)  
The invention discloses a display device, which is applied to rear projection system, comprising: a screen, which is curved; incident rays penetrating into a concave side of the screen, then being transmitted by the screen, and form parallel rays to be emitted out from the convex side of the screen; a projecting unit, configured to project rays of an image to the screen, the image including a valid area and an invalid area; a covering plank, located between the screen and the projecting unit, configured to cover the invalid area of the image for getting the light of the valid area of the image emitted by the projecting unit to project to the screen. The invention eliminates the fuzzy borders of the projected images with the use of the covering plank.

IPC 8 full level  
**G03B 21/00** (2006.01)

CPC (source: EP KR US)  
**G02F 1/0311** (2013.01 - EP US); **G02F 1/1347** (2013.01 - US); **G03B 21/00** (2013.01 - EP US); **G03B 21/10** (2013.01 - KR); **G03B 21/208** (2013.01 - US); **G03B 21/56** (2013.01 - KR); **G03B 21/62** (2013.01 - US); **G02F 1/0147** (2013.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3249464 A1 20171129; EP 3249464 A4 20180822; EP 3249464 B1 20200805**; AU 2015101926 A4 20190516; AU 2015376661 A1 20170831; CA 2973240 A1 20160721; CA 2973240 C 20190611; CN 105842963 A 20160810; HK 1222227 A1 20170623; JP 2018503876 A 20180208; KR 102267080 B1 20210621; KR 20170105056 A 20170918; NZ 734485 A 20201127; SG 11201705718W A 20170830; TW 201626090 A 20160716; TW I572968 B 20170301; US 2017315391 A1 20171102; US 9958768 B2 20180501; WO 2016112627 A1 20160721; ZA 201705416 B 20190130

DOCDB simple family (application)  
**EP 15877543 A 20150612**; AU 2015101926 A 20150612; AU 2015376661 A 20150612; CA 2973240 A 20150612; CN 2015081396 W 20150612; CN 201510014573 A 20150112; HK 16110415 A 20160901; JP 2017537990 A 20150612; KR 20177022429 A 20150612; NZ 73448515 A 20150612; SG 11201705718W A 20150612; TW 104144165 A 20151229; US 201514764172 A 20150612; ZA 201705416 A 20170810